THE COMMONWEALTH OF MASSACHUSETTS
Executive Office of Health and Human Services
Office of Health Services
Department of Mental Health

INPATIENT STUDY REPORT FOR THE GENERAL COURT

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction. The Department of Mental Health (hereinafter DMH or the Department) is pleased to present this report on adult continuing care inpatient services, submitted pursuant to language contained in line item appropriation 5095-0015 of the Commonwealth's Fiscal Year 2004 budget. Safeguarding the quality of DMH inpatient care is essential, but a comprehensive system of mental health care relies on a continuum of two key components: inpatient and community-based care. The Department respectfully requests a future opportunity to present to the General Court recommendations for service delivery enhancements to support the overall access, quality and effectiveness of the Department's community system of mental health care.

Principles. As the Department considered the possible reconfiguration of its existing adult continuing care inpatient system, the following decision-making criteria were applied:

- Impact on clients and their families.
- Quality of care (equal to or better than existing services).
- Adherence to evidence-based practices.
- Cost/benefit ratio of change.

Study Method. The Department's study examined its current adult continuing care inpatient bed capacity and projected future needs (demand). This analysis included:

- Trends in number of staffed beds and admissions to acute care general hospital psychiatric units and private psychiatric hospitals licensed by the Department.
- Admissions, census, discharges and length of stay data for Department adult continuing care inpatient services.
- Trends in civil versus forensic admissions to Department inpatient settings.
- Peer state comparisons.
- Number of current DMH adult continuing care inpatient clients ready for discharge, assuming community resources are available.

Study Conclusions. The Department currently maintains 900 adult continuing care inpatient beds across the state. The Department has found that:

- 268 current adult continuing care inpatient clients are ready for discharge to the community if sufficient resources are made available.
- The Department's adult continuing care inpatient bed capacity can be safely reduced to approximately 740 beds (assuming 93% occupancy rate) if community discharges and follow-up treatment, rehabilitation and support are adequately funded.
- The Department has an obligation to the Commonwealth to maintain continuing care inpatient treatment capacity for individuals with serious and persistent mental illness.

- The Department will not shift the burden of responsibility for continuing care inpatient services to general hospital psychiatric units or private psychiatric hospitals.
- Consolidation of DMH adult continuing care inpatient settings is possible, but significant capital renovations are required to assure safe, high quality physical settings that foster positive treatment outcomes.
- In the central region of the state, the Commonwealth will incur significant operational inefficiencies as well as capital cost burdens by continuing to maintain both Worcester State Hospital and Westboro State Hospital. The Department estimates that $59 million in capital costs will be required to keep both facilities in operation over the next ten years.
- Consolidating DMH inpatient facilities in the central Massachusetts region will address these inefficiencies and cost burdens while improving quality of care to clients.
- Given aging physical plant structures and extensive capital renovation requirements, existing facilities at either Worcester State Hospital or Westboro State Hospital do not provide a sound option for consolidated inpatient capacity in central Massachusetts over the long term.
- The feasibility of constructing a new state-of-the-art DMH facility for consolidated inpatient care in central Massachusetts should be considered as an option that responsibly plans for the future and addresses the goals of client and staff safety, quality care and avoidance of capital infusion into the compromised physical plants at Worcester and Westboro State Hospitals.

Recommended Next Steps. Based on the findings of the study, the Department recommends the following next steps:

- Community placements of 268 adult continuing care inpatient clients who are ready to leave.
- Funding community placements through $17.42 million in re-investment dollars resulting from the closure of 160 DMH adult continuing care inpatient beds.
- Reduction in DMH adult continuing care inpatient capacity from 900 to approximately 740 beds.
- Consolidation of inpatient services across fewer facilities to improve quality, achieve cost efficiencies and accommodate the projected reduction in bed demand.
- Establishment of a planning process among DMH, Executive Office of Health and Human Services (EOHHS), Executive Office for Administration and Finance (A&F) and Division of Capital Asset Management and Maintenance (DCAM) to determine the feasibility of constructing a new state-of-the-art DMH inpatient facility in central Massachusetts.
- Capital investment in DMH inpatient settings to address overdue renovations and assure safety and quality care.

INTRODUCTION: RESPONSE TO THE GENERAL COURT

This report is submitted pursuant to language contained in line item appropriation 5095-0015 of the Commonwealth's Fiscal Year 2004 budget:

> *For the operation of adult inpatient facilities, including the community mental health centers; provided, that in order to comply with the provisions of the Olmstead decision and to enhance care within available resources to clients served by the department, the department shall take steps to consolidate or close psychiatric hospitals managed by the department and shall endeavor within available resources to discharge clients residing in the inpatient facilities to residential services in the community when the following criteria are met: 1) the client is deemed clinically suited for a more integrated setting; 2) community residential service capacity and resources available are sufficient to provide each client with an equal or improved level of service; and 3) the cost to the commonwealth of serving the client in the community is less than or equal to the cost of serving the client in inpatient care; provided further, that any client transferred to another inpatient facility as the result of a facility closure shall receive a level of care that is equal to or better than the care that had been received at the closed facility; provided further, that the department shall report to the joint committee on human services and the house and senate committees on ways and means on the progress of this initiative, including both past actions and proposed future actions; provided further, that the report shall include an examination of the costs, benefits, and effect on quality of services provided by continuing the operation of Worcester State Hospital and shall identify alternative methods of providing the services currently provided by this institution; provided further, that the report shall include: the number of clients transferred from inpatient care into the community, the community supports provided to clients discharged from inpatient care into the community and the current inpatient bed capacity relative to the number of clients in psychiatric hospitals managed by the department; provided further, the report shall also include steps being taken to help minimize increases in travel distances for family members visiting clients at inpatient facilities resulting from the transfer of clients from one facility to another; provided further, that the department shall submit the report not later than December 1, 2003; provided further, that no action to reduce the client population of Worcester State Hospital for the sole purpose of closing the hospital shall be undertaken, and no steps shall be taken to close the institution through attrition, layoffs or any other means until a study of this reduction or closing is completed and the general court shall have approved the closure of Worcester State Hospital by law; and provided further, that the department may allocate funds in an amount not to exceed $5,000,000 from this item to item 5046-0000, as necessary, pursuant to allocation plans submitted to the house and senate committees on ways and means 30 days prior to any such transfer, for residential and day services for clients formerly receiving inpatient care at the centers and facilities.*

In order to meet this mandate, the Department, over the last eight months, has:

- Completed clinical assessments of adult continuing care inpatient clients to determine each person's potential for community placement and to identify the services needed to support each person in the community.

- Conducted an inpatient bed need analysis to evaluate the Department's current inpatient capacity, projected the Commonwealth's future demand for continuing care inpatient services and assessed needed changes to the Department's community-based service system.

- Examined the capital costs of maintaining and/or upgrading the physical plant infrastructures of all continuing care inpatient facilities operated by the Department to assure safety and quality of care.

- Reviewed the impact of the Fiscal Year 2003 closure of Medfield State Hospital which provided community expansion funding and enabled the Department to discharge, to community care, over 250 previously hospitalized individuals across all six of the Department's geographic areas.

In this report, the Department presents the findings of its study and outlines a plan for assuring that in the coming years the Department's adult continuing care inpatient services offer high quality care in sound physical settings.

Safeguarding the quality of DMH inpatient care is essential, but a comprehensive system of mental health care relies on a continuum of two key components: inpatient and community-based care. The Department respectfully requests a future opportunity to present to the General Court recommendations for service delivery enhancements to support the overall access, quality and effectiveness of the Department's community system of mental health care.

DEPARTMENT OF MENTAL HEALTH HISTORY AND MISSION

Massachusetts has been a leader in caring for individuals with mental illness since it built the first public psychiatric facility in the United States. Worcester State Hospital opened in 1833, serving as a model that other states soon followed. Over the next century, Massachusetts established a network of public hospitals for people with mental illness.

More than 100 years later, the federal Community Mental Health Centers Act of 1963 fostered a new emphasis on helping individuals with mental illness move out of hospitals and into the community to increase personal independence and empowerment. To achieve this goal, the Department began to establish a web of interwoven community services to care for those who would otherwise be hospitalized.

Four key periods highlight the progress achieved in Massachusetts during the past 40 years on behalf of citizens with mental illness:

- 1966 to 1974: Community-based services began to take hold, enabling more individuals with mental illness to be successfully treated outside of inpatient settings.

- 1973 to 1993: As systems of community-based care were strengthened, 12 of 16 Massachusetts state psychiatric hospitals were closed. Standards of access and quality for community programs were enhanced by the 1978 Brewster Consent Decree.

- 1986: Chapter 599 of the Acts of 1986 separated the Department of Mental Health from the Department of Mental Retardation. The Department of Mental Health's primary mission was clearly articulated "to provide for services to citizens with long-term or serious mental illness, early and ongoing treatment for mental illness, and research into the causes of mental illness" M.G.L. Ch. 19.

- 2000: Mental health insurance parity legislation, effective January 2001, prohibited long-standing discrimination in insurance practices for mental health care.

In recent years, renewed national attention has focused on the needs and rights of persons with mental illness:

- In Olmstead v. L.C., 527 U.S. 581 (1999) the Supreme Court ruled that the Americans with Disabilities Act (ADA) requires states to provide care for persons with disabilities in community-based, rather than institutionalized settings, when such placements are clinically appropriate and will not fundamentally alter the state's programs and services.

- The U.S. Department of Health and Human Services released *Mental Health: A Report of the Surgeon General* (1999). This report summarizes scientific advances in the understanding of mental health and mental illnesses and identifies gaps in access to quality treatment.

- In April 2002, President Bush announced the formation of the New Freedom Commission on Mental Health. Its final report, *Achieving the Promise: Transforming Mental Health Care in America* (2003) states "recovery from mental illness is now a real possibility [and thus] a life in the community for everyone can be realized."

The Department is proud of its solid foundation of comprehensive mental health services, represented by a system of both inpatient and community-based care. The Department continues to dedicate its efforts to building an integrated, high quality, cost effective mental health system responsive to the needs of individuals with mental illness.

A recent accomplishment of the Massachusetts mental health system was the April 2003 closure of Medfield State Hospital and the community re-investment of nearly $17 million in inpatient funds to expand the community service system statewide.

Of these reallocated dollars:

- $10.2 million was used to develop 255 community placements for adults receiving care throughout DMH continuing care facilities.

- $6.7 million was used to develop nine new Programs of Assertive Community Treatment for 540 adults in the community at high risk for hospital admission.

The re-investment of Medfield State Hospital dollars for community expansion helped the Commonwealth:

- Meet the requirements of the U.S. Supreme Court Olmstead decision and avoid threatened litigation.

- Offer significant opportunities for formerly hospitalized persons to live in apartments and group homes and participate in the daily life of their local neighborhoods and communities.

As of January 1, 2004, among the 255 clients who moved to community living, only 17 (6.7%) clients were re-hospitalized in a continuing care facility. These individuals' success in community living is a reflection of their determination to live outside the hospital and an indicator of the effectiveness of the services they receive. Most individuals report that their quality of life has been improved by greater control over choices they make in their lives.

Over the last decade, the Department has significantly increased the range and scope of community mental health services. This has resulted in decreased reliance on DMH inpatient care and a spending shift in support of community-based services:

- In 1993, the Department's adult continuing care inpatient bed capacity was 1,444. Approximately 46% of the Department's service delivery budget was spent for inpatient care; 54% was spent on community services.

- In 2004, the Department's adult continuing care inpatient bed capacity is 900. Approximately 26% of the Department's service delivery budget is spent for inpatient care; 74% is spent for community services.

The Department's accomplishments during this ten-year period included increases in community residential services and housing stock for persons with serious and persistent mental illness. For example:

- Adult community residential services, providing mental health treatment and supervision, increased from 3,909 bed capacity (1993) to 6,500 bed capacity (2003).

- During the 1990s, either alone or with a formal partner or agent, the Department also secured affordable housing resources for more than 5,600 individuals with serious and persistent mental illness who previously lived in substandard housing, were homeless or resided in more restrictive inpatient settings.

Despite these impressive gains, however, the Department recognizes that, among persons with mental illness in Massachusetts, there remain many unmet needs for high quality treatment, physical health care, housing, employment and opportunities for recovery and integration into the fabric of daily life.

The Department believes that the vast majority of people with serious and persistent mental illness can live safely and productively in the community if there are adequate services and supports. Over the years, this belief has been bolstered by scientific data. Research has broadened our knowledge about mental health, highlighting the potential for improvement in providing mental health care. However, practice often lags behind the research. Far too often, treatment and services that are based on rigorous clinical research – also known as "evidence-based practices" – languish for years rather than being used effectively in the field at the earliest opportunity.

According to the Institute of Medicine report, *Crossing the Quality Chasm: A New Health System for the 21st Century* (2001), the lag time between discovering effective forms of treatment and incorporating them into routine patient care is unnecessarily long, often about 15 to 20 years.

The Department is committed to timely use of evidence-based practices as a way to assist people with serious and persistent mental illness achieve personal goals of well-being and recovery. We have the knowledge and we believe that the time to act is now.

Principles are bolstered by fiscal realities. The average cost of serving an adult in a DMH continuing care inpatient setting is significantly more than the average cost of enabling an adult in a continuing care inpatient setting to live in the community with necessary services. The following provides a brief description of respective inpatient and community service costs and revenue:

- Continuing Care Inpatient Services. The average cost (i.e., direct care, administrative and fringe) of providing continuing care inpatient services in a DMH hospital is approximately $168,489 per bed per year. Revenue averages $40,160 per bed per year. The major revenue source is Federal Financial Participation (FFP), which is the federal government's share of a state's expenditures under the Medicaid program. After revenue offset, the net state cost of providing adult continuing care inpatient services in a DMH hospital is approximately $128,329 per bed per year.

- Community Services. The average cost to discharge a current DMH adult continuing care inpatient client and provide necessary community services will be approximately $80,000 per person per year. This includes projected average DMH costs of $65,000 per person per year and projected average Medicaid costs of $15,000 per person per year:

    - DMH Community Services Cost. DMH projected average cost of $65,000 per person per year will cover case management, residential rehabilitation, housing and support. The FFP for DMH adult case management is expected to average $1,500 per person per year. The FFP for DMH adult residential rehabilitation services is expected to average $6,000 per person per year. Total FFP for both services is expected to average $7,500 per person per year.

    - Medicaid Community Services Cost. Medicaid projected average cost of $15,000 per person per year will cover physical health and mental health treatment, such as acute psychiatric inpatient care, physician office visits, medications and clinic visits. The FFP will average $7,500 per person per year.

    - Net State Cost of Community Services. After FFP revenue offset to both DMH and state Medicaid expenditures, the net state cost of discharging a current DMH adult continuing care inpatient client and providing necessary community services is expected to average $65,000 per person per year.

In summary, the net state cost to serve an adult in a continuing care inpatient setting is approximately $128,329 per bed per year, while the net state cost to serve the same person in the community will be approximately $65,000 per year. Discharging adults from continuing care inpatient units to the community with necessary treatment, rehabilitation and support will bring quality of life benefits to individuals with serious and persistent mental illness and prove cost effective for the Commonwealth.

The Department unequivocally seeks to preserve and expand its community services network so current inpatient clients who can safely be treated in less restrictive settings have this opportunity. Through a waiting list that is regularly updated, the Department knows that at any given time there are more than 250 individuals receiving inpatient services who could be better served in community settings that are less expensive, more encouraging of independence and self-fulfillment, and equally or more effective in producing positive treatment outcomes.

As the successful closure of Medfield State Hospital demonstrates, community-based services must be expanded for current DMH inpatient clients. As significant numbers of individuals are discharged from the hospital, there must be a concomitant move of resources from inpatient care to the community. At the same time, the Department must preserve the delivery of high quality inpatient care for individuals who require this intensive level of treatment.

As the Department seeks to improve its total system of mental health care, including the reconfiguration of inpatient services, we will lead a process that:

- Ensures clients receive services that are equal to or better than their current placement and service array.
- Tailors services to each person's preferences and needs.
- Involves individuals and their families in service planning and placement.
- Assures continuity of care and minimizes the impact of transition and change for each person. In support of this goal, DMH will hold firmly to its current policy and practice, whereby no DMH inpatient client is discharged from one of our facilities to a homeless shelter.
- Ensures geographic access across the Commonwealth to high quality mental health care, including community-based and inpatient treatment.

CURRENT DEPARTMENT OF MENTAL HEALTH ADULT CONTINUING CARE INPATIENT BED CAPACITY

Through the supervision or direct operation by the Department, the Commonwealth of Massachusetts has a network of inpatient services to meet the needs of individuals with serious and persistent mental illness. These inpatient services are divided into two types: acute care and continuing care.

Most acute psychiatric inpatient care in Massachusetts is provided by general hospital psychiatric units and private psychiatric hospitals that are licensed by the Department under M.G.L. Ch. 19. Of 948 total DMH adult inpatient beds, 48 acute inpatient beds are operated by three DMH Community Mental Health Centers (CMHCs), with 16 beds at each CMHC. The remaining 900 DMH adult inpatient beds deliver continuing care inpatient services for individuals whose mental illness symptoms or level of functioning require longer treatment stays than can be provided in acute inpatient units as well as individuals requiring forensic mental health evaluation or treatment.

Of the 900 DMH adult continuing care inpatient beds:

- 523 (58%) are provided in DMH state-operated facilities (Taunton, Westboro, Worcester).
- 269 (30%) are provided in DMH state-operated units located in Massachusetts Department of Public Health Hospitals (Shattuck, Tewksbury).
- 78 (9%) are provided in DMH state-operated CMHCs (Fuller, Lindemann).
- 30 (3%) are provided through a contract with a hospital (Park View Hospital, Springfield).

The Department provides inpatient services to both civil and forensic status clients:

- Individuals on civil status have been admitted on involuntary or on conditional voluntary status to an inpatient facility for the purpose of psychiatric treatment. Conditional voluntary admission requires an inpatient client to give three days notice of intention to leave, during which time the facility may seek involuntary commitment before the three days pass.
- Forensic admissions are involuntary admissions to an inpatient facility, which originate from the criminal justice system. The most common forensic admissions occur for the purpose of pre-trial evaluation of competency to stand trial or criminal responsibility. Forensic admissions may also occur to aid in sentencing and for treatment of defendants found incompetent to stand trial or not guilty by reason of insanity, or to provide mental health treatment to inmates from correctional facilities whose mental illness is such that they cannot be safely maintained in a correctional setting.

Our analysis of bed need has included a review of forensic bed use, because the Department operates only a few designated forensic units. Most of the Department's inpatient units treat both civil and forensic status clients. Therefore, for this study, the Department is not distinguishing between civil and forensic status beds, as legal status does not impact bed count.

The table on the following page shows the Department's distribution of adult inpatient capacity across the state.

Current DMH Adult Inpatient Services: Location and Capacity*

DMH AREA	FACILITY	YEAR OPENED	CONSTRUCTION OR RENOVATION OF CURRENT SPACE	INPATIENT TYPE	FY04 Number of Beds
Metro Boston	S.C. Fuller CMHC	1972	1972 (Construction)	Continuing Care	36
	Lindemann CMHC	1971	1971 (Construction)	Continuing Care	42
	Shattuck Hospital	1954	1954 (Construction)	Continuing Care	125
North East	Tewksbury Hospital	1854	1956 (Construction)	Continuing Care	144
Southeastern	Taunton State Hospital	1854	1996 (Renovation)	Continuing Care	169
Central MA	Worcester State Hospital	1833	Bryan: 1954 (Construction)	Continuing Care	156
Metro Suburban	Westboro State Hospital	1889	Daniel & Hennessy: 1968 (Construction)	Continuing Care	198
Western MA	Park View Hospital	1952	1993 (Renovation)	Continuing Care	30
Subtotal: Continuing Care					**900**
Metro Suburban	Quincy CMHC	1983	1983 (Construction)	Acute Care	16
Southeastern	Pocasset CMHC	1977	1977 (Construction)	Acute Care	16
Southeastern	Corrigan CMHC	1969	1969 (Construction)	Acute Care	16
Subtotal: Acute Care					**48**
TOTAL					**948**

*** Not reflected on this chart are 48 adolescent inpatient beds located in DMH facilities: 18 beds at Taunton State Hospital and 30 beds at Westboro State Hospital.**

DETERMINATION OF FUTURE DEPARTMENT OF MENTAL HEALTH ADULT CONTINUING CARE INPATIENT BED DEMAND AND CAPACITY

In order to evaluate the Department's current adult inpatient capacity and to project the Commonwealth's future demand for adult continuing care inpatient services the Department, in conjunction with Public Consulting Group, Inc. (PCG):

- Examined the demand for psychiatric services by looking at utilization of general hospital acute psychiatric units and private psychiatric hospitals and the transfer of clients from these acute psychiatric services to adult continuing care inpatient facilities operated by the Department.

- Assessed trends in the use of the Department's adult continuing care inpatient beds.

- As a benchmark for Massachusetts, compared trends in the Department's inpatient services to trends among the following peer states: Connecticut, Maine, Michigan, Minnesota, New Hampshire, Ohio, Pennsylvania, Vermont, and Wisconsin. Fiscal Year 2002 staffed bed, admission and average daily census data were reviewed. Fiscal Year 2001 data were substituted where Fiscal Year 2002 data were unable to be collected from peer states.

- Identified current DMH continuing care adult inpatient clients ready for discharge to community care.

- Gauged the future need for the Department's adult continuing care inpatient bed capacity.

Data sources used for the study included:

- Staffed bed statistics for community hospitals with inpatient psychiatric units and freestanding psychiatric hospitals from the 2002 American Hospital Association Annual Survey.

- Massachusetts Division of Health Care Finance and Policy's (HCFP) 403 cost reports for Department-licensed acute general hospital psychiatric units and private psychiatric hospitals for Fiscal Years 2000-2002.

- Fiscal Year 2001-2003 adult admissions, average daily census, discharges and lengths of stay for the Department's continuing care inpatient facilities.

- Requests for transfer from acute general hospital psychiatric units and private psychiatric hospitals to adult continuing care inpatient facilities operated by the Department.

1) Utilization of Acute General Hospital Psychiatric Units and Private Psychiatric Hospitals

In order to determine future DMH adult continuing care inpatient bed capacity, the Department must examine the role its inpatient resources play in the current mental health environment. One crucial component in this evaluation is demand. A key factor in determining demand is acute psychiatric inpatient utilization. Some individuals treated for acute psychiatric episodes in general hospital psychiatric units and private psychiatric hospitals are later transferred to DMH adult inpatient facilities for continued inpatient care. As such, acute psychiatric inpatient services are a chief referral source for the Department's adult continuing care beds.

Trends in the provision of acute psychiatric care have direct implications for the provision of adult continuing care inpatient services. The Department and PCG found that in Massachusetts:

- Each year between Fiscal Years 2000-2002, the number of staffed beds in acute psychiatric inpatient services decreased by 3.39%.

- There was also a .4% decline per year in admissions to acute psychiatric inpatient beds during the same time period.

2) Department of Mental Health Adult Continuing Care Inpatient Utilization: Civil Beds

Since demand for services in Massachusetts' acute psychiatric beds has declined, a similar decline might be predicted in the demand for DMH adult continuing care inpatient services. This appears to be the case. The Department and PCG determined the following:

- The three-year trend in civil admissions to DMH adult continuing care inpatient services shows a 1.33% per annum decrease from 656 in Fiscal Year 2001 to 630 in Fiscal Year 2003.

- As admissions have declined at most DMH adult continuing care inpatient services, so has the average daily census. The Fiscal Year 2003 average daily adult continuing care census of patients on civil status was 627, an average annual decline of 5% since Fiscal Year 2001.

- Over this same three-year period, discharges of patients on civil status across the Department's adult continuing care facilities grew by an average annual rate of 2.7%.

- The average length of stay in DMH adult continuing care facilities declined from Fiscal Year 2001 to Fiscal Year 2003 (999 days to 713 days). During this time period Medfield State Hospital closed and 255 adult continuing care clients across Massachusetts moved to community placements. Data indicate that adult continuing care lengths of stay increased slightly (by 1%) in Fiscal Year 2003. As detailed later in this report, the Department has gathered information indicating that a lack of needed community-based services is preventing further discharge of a significant number of adult continuing care clients.

3) Department of Mental Health Adult Continuing Care Inpatient Utilization: Forensic Beds

Data collected by the Department on forensic inpatient utilization indicate that:

- Forensic census of the Department's adult continuing care beds had an annual growth rate of less than 1% per year between Fiscal Years 1997 and 2002.

- Over the same time period, forensic admissions declined by 1% per year.

- Historically, clients on forensic status have used 27-28% of the Department's adult continuing care inpatient beds.

- In Fiscal Year 2003, adult forensic inpatient clients used a total of 91,216 bed days or 250 beds. Since there has been little change in the forensic numbers over time, the Department expects to maintain 250 inpatient beds in its continuing care facilities to meet forensic demand.

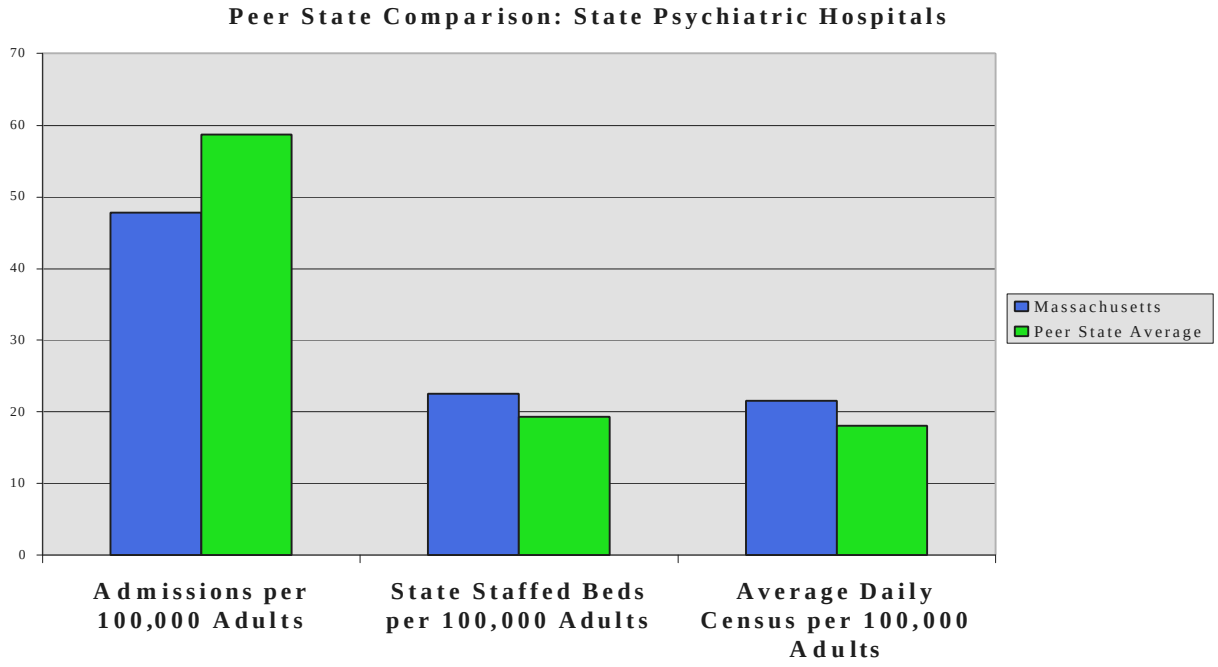
4) Peer State Comparison

Analyzing trends in use of the Department's adult continuing care inpatient services is critical to projecting future demand. Examination of trends in peer states is also important in order to compare the service and resource allocation of the Department to states with similar structures, geography and populations.

Nine states were selected for peer state comparison: Connecticut, Maine, Michigan, Minnesota, New Hampshire, Ohio, Pennsylvania, Vermont, and Wisconsin. These states either neighbor Massachusetts or are of comparable size and have at least one large urban area and a history of progressive mental health policy.

Major findings from the peer state comparison for adults ages 18 and older include:

- For adult admissions to state psychiatric facilities per 100,000 adults, Massachusetts at 47.8 admissions per 100,000 adults is lower than the average in its peer states (58.7 admissions per 100,000 adults).
- Massachusetts has more state staffed adult beds (22.5 beds per 100,000 adults) and a higher average daily census (21.6 patients per 100,000 adults) than the other peer states (19.3 state staffed beds per 100,000 adults; 18.1 average daily census per 100,000 adults).



Note: States used for peer comparison were Connecticut, Maine, Michigan, Minnesota, New Hampshire, Ohio, Pennsylvania, Vermont, and Wisconsin. Because there are differences in practice patterns and utilization of state-operated psychiatric inpatient facilities across the peer states, the numbers and rates displayed in this chart include adult acute and continuing care civil and forensic admissions and census in psychiatric inpatient services operated by the State Mental Health Authorities in Massachusetts and the identified peer states. Calculations for Massachusetts are based on the state's total population of 4,849,033 adults ages 18 and older (2000 U.S. Census).

5) Adult Continuing Care Inpatient Clients Who are Ready to be Discharged

In order to help project the number of adult continuing care inpatient beds that the Department will need in the future, the Department surveyed its continuing care facilities in September 2003. Clinicians were asked how many clients could be discharged from inpatient care into the community within the next year if necessary community-based resources were available. Across the six DMH Areas, 268 adult continuing care inpatient clients were identified as ready to leave inpatient services for community-based care.

PROPOSED ADULT CONTINUING CARE INPATIENT BED CAPACITY

A comprehensive mental health system must offer appropriate levels of care consistent with need. At any given time, a proportion of individuals with serious and persistent mental illness require psychiatric inpatient levels of care. In Massachusetts, the Department has responsibility for assuring extended, continuing care inpatient treatment for individuals with serious and persistent mental illness. The Department is committed to maintaining adequate access to continuing care inpatient services for the citizens of the Commonwealth. The Department will not shift the burden of responsibility for continuing care inpatient services to general hospital psychiatric units or private psychiatric hospitals.

To serve the current demand for adult continuing care inpatient services, the Department presently has 900 continuing care inpatient beds.

To determine future adult continuing care bed capacity requirements, the Department has given particular consideration to:

- Massachusetts' trends reflecting decreased use of acute inpatient psychiatric care in general hospital psychiatric units and private psychiatric facilities licensed by the Department.

- Massachusetts' declining trend in adult continuing care inpatient admissions and average daily census and concurrent increasing trend in adult continuing care discharge rates.

- Clinical determinations that 268 adult continuing care inpatient residents are ready for discharge to community placements.

The following chart summarizes the Department's projections for future adult continuing care inpatient capacity.

Estimated DMH Adult Continuing Care Census and Bed Need

Current Adult Continuing Care Bed Capacity	900
FY 2003 Average Adult Census (Civil and Forensic)	881
Less Planned Transfers to the Community	(268)
Resulting Census	613
Maintenance of capacity to accept new patients and allow for repairs and renovation	73
Adjusted Census	686
Proposed Capacity (Assuming 93% Occupancy Rate)	740

Through the community placement of 268 inpatient clients, the Department expects the adult continuing care inpatient average daily census to decline to 613. The Department projects that the actual number of beds used will be higher than 613 and has therefore adjusted the expected average daily census from 613 to 686.

There are several reasons for this upward adjustment to an average daily census of 686. Hospitals must have sufficient capacity to accept new patients, and extra beds are always needed to allow for repairs and renovation. Further, the Department believes that our assumptions regarding bed utilization and occupancy must be more conservative than in the past. In Fiscal Year 2003, the occupancy rate for the Department's 900 adult continuing care beds was 98%. The Department has concluded that an occupancy rate of 93% is a more realistic projection for the future to accommodate management of admissions and discharges and to respond to any unanticipated changes in bed demand.

To provide inpatient care for the projected average daily census of 686 adult beds, representing an occupancy rate of 93%, a total capacity of 740 beds is required. The Department's planning process indicates that a capacity of 740 adult continuing care inpatient beds will meet future need in the state. However, the total community placements achieved, and origin by DMH Area, may result in adjustments to the final statewide bed capacity and number of beds provided within each facility.

DMH PROPOSAL TO ADDRESS SYSTEM GAPS IN CARE: COMMUNITY SERVICE EXPANSION AND INPATIENT CONSOLIDATION

Over the last few months, in preparing this report, the Department has completed the following planning activities:

- Determined how to best meet our obligations under Olmstead to the 268 adult continuing care inpatient clients, identified in September 2003 as clinically ready to move to community placements.

- Assessed our ongoing ability to respond to the needs of all individuals with serious and persistent mental illness who rely on the Department's system of community-based and inpatient care.

- Developed a proposed redistribution of the total existing Departmental resources to meet these two major goals:

    1) Community Services Expansion. Fund community placements for 268 inpatient adults who are ready and waiting to leave the hospital.

    2) Facility Consolidation. Reconfigure DMH adult continuing care inpatient resources, consistent with the projected reduction in bed capacity from 900 to 740 beds. In addition, assure that all individuals who need ongoing psychiatric inpatient care receive exemplary treatment and rehabilitation in safe, high quality physical settings.

The following sections outline the Department's proposed plans and timetable for completion of the community services expansion and inpatient consolidation.

COMMUNITY SERVICES EXPANSION

During the Fall of 2003, DMH clinical staff determined how many adult continuing care inpatient clients can be safely transferred to the community. The 268 individuals recommended for placement have been assessed as ready for community living. All were evaluated and found to need an integrated set of community treatment, rehabilitation and support services. As the Department's clinicians and administrators have worked together to estimate community placement costs for the 268 individuals, they have relied on their knowledge of clients' needs and service delivery costs. They have also considered the successful community expansion that resulted from the April 2003 closure of Medfield State Hospital.

Based on this analysis, community service costs for the 268 clients who are waiting to be discharged are expected to average $80,000 per person annually, including DMH expenditures of $65,000 and Medicaid expenditures of $15,000. After revenue offset, the net cost to the state will be $65,000 per person per year. The community-based services these individuals need are less costly than continuing inpatient care. However, the Department's community-based mental health system currently does not have the capacity or resources to appropriately and safely treat these 268 persons. The Department proposes to cover these additional community services costs through re-allocation of dollars from inpatient care.

When Medfield State Hospital closed, the Department re-allocated inpatient dollars to assure that 255 discharged adults would receive necessary case management, housing, residential services, treatment, rehabilitation and support. Through the Medfield closure process, an average of $40,000 per person was re-allocated from inpatient to community care.

In comparison, as the Department plans for the next phase of 268 discharges, it projects that an average of $65,000 per person in Department dollars must be re-allocated for individuals leaving inpatient care for community living. This is $25,000 more per person than was allocated for the 255 discharges accomplished through the Medfield closure.

There are two major reasons why more inpatient dollars must be re-allocated for these 268 clients. First, community services for the clients discharged from inpatient care through the Medfield closure, while funded by a significant reallocation of $10.2 million in Medfield inpatient dollars, also relied on the creative use of available base community resources. The Department’s community system is now stretched to the maximum and will be unable to augment services for the 268 additional adults waiting to leave inpatient settings. Second, clinical assessments indicate that the next phase of 268 discharges will include a higher proportion of clients who require intensive services to live successfully in the community.

Each of the Department’s six Areas has individuals waiting to leave adult continuing care inpatient services. To meet the community needs of these 268 inpatient clients, all DMH Areas will require an investment of new resources. At an average annual expense of $65,000 per placement, it will cost the Department a projected $17,420,000 to fund community services for the 268 adults who are ready to leave inpatient beds.

The Department proposes to complete the 268 community placements in the following manner:

- As 268 civil status adult continuing care inpatient clients gradually move to community services, 160 adult continuing care beds will close across the Department's inpatient system. Of the 268 beds vacated through discharge, 108 (40%) are expected to remain open to assure the planned adult continuing care inpatient capacity of approximately 740 beds.

- The 268 community placements will be funded through re-investment of $17.42 million gained by reducing 160 beds and closing an estimated eight inpatient units.

The proposed inpatient unit closures, $17.42 million community re-investment, and transfer of the 268 adult continuing care inpatient clients into the community will occur over time. An incremental approach will aid DMH inpatient and community staff to carry out carefully designed discharge planning activities and enable each DMH Area to fine-tune community services to suit client needs. The Department's preliminary recommendations are to phase-in the community placements over a two-year period, beginning in the Spring of 2004.

The table below shows the recommended phase-in of community placements, inpatient unit closures and the community re-investment. The table demonstrates that the transfer of clients into the community and the community investment must be a consistent strategy for DMH over the next few fiscal years. The Department House 1 budget reflects this strategy. As bed closures occur, the Department proposes to re-direct inpatient monies to fund needed community care.

As the following calendar of activity demonstrates, by July 1, 2006 (beginning of Fiscal Year 2007) the Department expects to reduce the adult continuing care inpatient capacity from the current Fiscal Year 2004 level of 900 beds to approximately 740 beds.

Timetable for Completion	Projected Community Placements	Projected Adult Continuing Care Unit Closures	Planned Reduction of Adult Continuing Care Bed Capacity	Required Community Investment (Annualized)
July 1, 2004	30	0	0	$1,950,000
July 1, 2005	130	4	80	$8,450,000
July 1, 2006	108	4	80	$7,020,000
Total	268	8	160	$17,420,000

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FACILITY CONSOLIDATION

The Department's proposal for facility consolidation of adult continuing care inpatient beds is based on the following principles:

- Clients should receive inpatient services in settings that foster effective treatment and rehabilitation, protect safety, support privacy and dignity, and promote personal recovery and return to community living as soon as possible.

- Inpatient staff can best help clients gain positive treatment outcomes in physical care settings that promote client and staff well being and safety.

- Client and family member access to geographically accessible care should be a high priority.

- Transfers of clients from one geographic location to another or from one facility to another should be minimized.

- Cost efficiencies should be maximized in both service delivery operations and capital maintenance.

- Physical space will be maintained for the 48 adolescent inpatient beds housed within DMH facilities.

The most significant features of the Department's proposed inpatient reconfiguration include:

- Staff Resources. To support high standards of service delivery and quality of care, the Department will assure consistent staff-to-patient ratios and staffing patterns across all adult continuing care inpatient units.

- Location of Adolescent Beds. Preservation of 48 adolescent inpatient beds with 18 beds maintained at Taunton State Hospital and 30 beds (two 15-bed units) maintained in central Massachusetts. The Department also proposes to maintain 30 locked adolescent Intensive Residential Treatment Program (IRTP) beds in central Massachusetts.

- Metro Boston Area: Reduction in total capacity from 203 to approximately 185 beds, through consolidation of adult continuing care inpatient resources from three locations to two. Inpatient beds will be maintained at Solomon Carter Fuller Mental Health Center (CMHC) and Shattuck Hospital, but the Lindemann CMHC will no longer provide inpatient services. As a pivotal DMH facility, the Lindemann CMHC will remain open to deliver essential community mental health services.

- North East Area: Reduction and reconfiguration of the DMH-operated Hathorne units at Tewksbury Hospital from 144 to approximately 88 beds. The planned reduction in the bed capacity of the Hathorne units at Tewksbury Hospital is based on the following:

  - The North East Area has determined that over half of the 144 current adult continuing care inpatient clients on the Hathorne units are ready for discharge. Therefore, the number of adult continuing care inpatient beds required in the North East Area is expected to substantially decrease.

  - Further, by agreement with the town of Tewksbury, a significant number of clients on forensic status are already routinely transferred to Metro Boston DMH facilities or Taunton State Hospital.

  To assure that the projected 88 bed capacity is provided in the most optimal physical environment, the Department proposes to renovate and re-design the Hathorne Units, changing the current layout of four 36-bed units to four 22-bed units. The Department believes that reducing the size of the Hathorne units will result in a major upgrade to client care and safety.

- Southeastern Area. Taunton State Hospital's current adult continuing care inpatient bed capacity maintained at approximately 169 beds. About 40% of the adult continuing care inpatient clients at Taunton State Hospital have forensic commitment status, and capacity must be maintained to assure evaluation and treatment of these individuals. To facilitate service delivery efficiencies, the Department proposes to re-design the current adult units at Taunton State Hospital into seven 24-bed units. As community placements are accomplished in the Area over the next several years, the Department may consider adjustments to Taunton State Hospital's overall bed capacity and renovation plans.

- Western Massachusetts Area: Expansion of adult continuing care inpatient capacity from 30 to 40 beds, so clients currently served at Worcester State Hospital can receive inpatient services closer to their homes and families.

- Central Massachusetts and Metro Suburban Areas: Consolidation of inpatient capacity at Westboro and Worcester State Hospitals, from a current capacity of 198 adult continuing care beds at Westboro and 156 adult continuing care beds at Worcester (354 total) to a combined capacity of approximately 260 adult continuing care beds. In the next section, DMH reviews options for consolidating inpatient capacity in central Massachusetts.

The following table outlines: 1) the current configuration of the Department of Mental Health's 900 adult continuing care beds and 48 adolescent inpatient beds and 2) the proposed configuration of 740 adult continuing care beds and 48 adolescent inpatient beds. This proposed reconfiguration may be subject to adjustments, based on the number and origin of community placements completed by each DMH Area over the next several years.

Adult and Adolescent Continuing Care Inpatient Beds*

DMH Area	Location	Current Inpatient Beds	Proposed Inpatient Beds
Metro Boston	Solomon Carter Fuller CMHC	36	60
	Lindemann CMHC	42	0
	Shattuck Hospital	125	125
North East	Tewksbury Hospital	144	88
Southeastern	Taunton State Hospital	187	185
Central MA	Worcester State Hospital	156	290
Metro Suburban	Westboro State Hospital	228	
Western MA	Park View Hospital	30	40
Total:		**948**	**788**

***Notes regarding table:**

- **Proposed inpatient beds are approximations and could change due to the evaluation of facility design and operations, and cost/revenue implications.**
- **Included in both the current and proposed inpatient bed capacity numbers are 48 adolescent inpatient beds located in DMH facilities: 18 beds currently located at Taunton State Hospital and 30 beds currently located at Westboro State Hospital. DMH proposes to maintain 18 adolescent beds at Taunton State Hospital and 30 adolescent beds in the central region in Massachusetts.**
- **The Lindemann CMHC will no longer provide inpatient services. However, this CMHC will remain open to deliver essential community mental health services.**

ADULT CONTINUING CARE INPATIENT SERVICES: CENTRAL MASSACHUSETTS

During the Fiscal Year 2004 budget process, the Department proposed the closure of Worcester State Hospital. The Legislature asked the Department to complete a study of its adult inpatient services before taking any action with regard to facility closure or consolidation.

Because the proposed Worcester State Hospital closure was a major impetus in the Legislature's request for this inpatient study, the Department has devoted significant effort to reviewing the future design of adult continuing care inpatient services in the central region of Massachusetts. This section presents an analysis of future inpatient bed need and design in the state's central region.

Although Worcester and Westboro State Hospitals are located only nine miles apart, concerns from both legislators and interested citizens about preserving geographic access prompted the Department to re-visit the feasibility of keeping both these facilities open.

The Department's conclusion is that the Commonwealth is incurring substantial, burdensome costs by continuing to maintain both Worcester State Hospital and Westboro State Hospital. Inpatient resources currently support 156 adult beds at Worcester and 198 at Westboro (current capacity: 354 total). However, the Department's inpatient capacity analysis indicates that no more than 260 adult continuing care beds will be needed in the future to serve both the Central Massachusetts and Metro Suburban DMH Areas.

The Department's determination is that, over the long term, there will be no quality of care or fiscal benefits achieved by maintaining DMH inpatient beds in central Massachusetts at two separate facilities. In fact, DMH's in-depth review of both Worcester State Hospital and Westboro State Hospital over the past months has raised serious concerns about the long-term viability of either facility for delivery of DMH inpatient care.

There is clear evidence that both Worcester State Hospital and Westboro State Hospital suffer from compromised physical structures and lack of capital attention. These physical plant issues impact client safety and quality of care at each facility.

Both Worcester State Hospital and Westboro State Hospital require extensive capital infusion to address deferred maintenance, life safety and utility infrastructure needs. Current DMH estimates, assuming Fiscal Year 2004 cost levels, suggest that capital infusion totaling $59 million will be needed to keep both facilities in operation during the next 10 years.

These costs include:

- Utility system replacements. Existing utility infrastructures are antiquated, inefficient, in disrepair, do not meet environmental standards and in some cases are unsafe.

- Exterior façade repair. At both facilities, the primary inpatient care buildings have brick exteriors that suffer from water damage, requiring the replacement of some sections, re-pointing of the remaining sections and window replacement.

- Life safety improvements. While Worcester State Hospital now has an active sprinkler system, none of the inpatient environments at Westboro offer the same level of fire protection.

Despite these existing issues, the two facilities have remained in constant operation. This has been accomplished with minimal capital investment focused on life safety and ADA issues and the diligence of local staff in addressing emergent, corrective and preventative maintenance. The result of these efforts is that both facilities currently meet Department of Public Safety occupancy standards (subject to annual inspection), and both meet the minimum life safety codes for the occupancy type.

In considering whether DMH inpatient capacity in central Massachusetts can be consolidated into one facility, the Department has projected a required bed capacity of approximately 290 inpatient beds (no more than 260 adult beds and 30 adolescent beds). In addition, space for 30 locked adolescent IRTP beds in the central region of Massachusetts will be required.

After a careful review of existing care environments at each facility, the Department has concluded that the desired number of beds cannot be provided at either Worcester State Hospital or Westboro State Hospital on a long-term basis. Each of these facilities is out-dated and aging. Maintained primarily through "quick fixes," neither Worcester nor Westboro has received the required capital maintenance to support current facility needs - let alone prepare for the future.

In addition to limitations posed by aging structures, there is a larger issue emerging relative to inpatient care environments that the Department believes cannot be addressed in the existing physical plants at either Worcester or Westboro State Hospitals. Standards for healthcare have advanced, while the Department's inpatient environments have not been able to keep pace.

Issues relative to current inpatient environments include the following:

- Neither Worcester nor Westboro has an updated heating, ventilation and air conditioning (HVAC) system. Many inpatient clients are prescribed psychotropic medications, which result in thermal comfort issues. Overheated inpatient units in spring and summer months exacerbate individuals' symptoms.

- The lines of sight within existing inpatient units are structurally encumbered by walls and columns, preventing the visibility necessary for clinical staff to ensure client safety.

- Limited square footage negatively impacts inpatient clients' personal space and privacy - critical for persons struggling to recover from the effects of serious and persistent mental illness.

- The narrow and enclosed feel of the current environments is not conducive to a therapeutic milieu. A much wider and open unit space that is washed with ample light is now considered the accepted standard. Existing inpatient care building structures do not allow the Department to appropriately address this issue.

- The appearance of contemporary psychiatric hospitals has changed based on client, family and provider input - from stark institutions to more accessible and inviting health care settings.

Physical changes in inpatient environments can positively or negatively affect the well being of clients and staff. Numerous studies demonstrate how state-of-the-art renovations to inpatient and day program areas result in positive outcomes such as decreased rates of client violence, enhanced client self image and fewer unscheduled staff absences.

Based on its review of options for delivery of inpatient care in the central region of Massachusetts, the Department recommends that the closure of both Worcester and Westboro State Hospitals and the construction of a new DMH inpatient facility be given strong consideration as a responsible plan for the future.

The Department believes that the opportunity to build a new state-of-the-art DMH inpatient facility would address the critical goals of client and staff safety, quality and avoidance of extensive capital costs at Worcester and Westboro State Hospitals. The Department further believes that construction of a new DMH facility can represent pro-active investing in a sound, modern physical setting whose years of viability will extend far beyond those of either Worcester or Westboro.

The Department recommends the establishment of a planning process among DMH, the Executive Office of Health and Human Services (EOHHS), Executive Office for Administration and Finance (A&F) and Division of Capital Asset Management and Maintenance (DCAM) to determine the feasibility of constructing a new DMH inpatient facility in central Massachusetts.

Key issues to be addressed through the planning process will include:

- Capacity of the new facility
- Design features
- Costs
- Financing strategies
- Timeline for development and construction.

REFERENCES

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